



09-NEWS-0010

May 4, 2009

Space Tracking and Surveillance System's Demonstration Program Space Vehicle Two Ships to Canaveral

The Missile Defense Agency's Space Tracking and Surveillance System (STSS) Demonstration Satellite Program has shipped one of two planned satellites to the Eastern Launch Site at Cape Canaveral, Fla. It will be closely followed by its sister vehicle in preparation for a tandem launch planned for August 2009.

The shipment of Space Vehicle-2 (SV-2) was the culmination of a rigorous suite of test-like-you-fly checkouts. Since payload integration in December 2006, the vehicle has seen multiple Integrated System Tests, extensive Thermal Vacuum testing, and Acoustic testing in the stacked launch configuration.

The testing conducted on SV-2 proved that it is capable of operating in its on-orbit environment. During the Thermal Vacuum test, the spacecraft was put through its paces over a 79-day test at near-vacuum pressure. Multiple infrared sources placed inside the chamber tested the agile track sensor's ability to track more than one target, and operational crews sent commands from the operational ground station located at Schriever Air Force Base, Colo. Additionally, the vehicle was exposed to its maximum expected operational temperature extremes.

During the acoustic test, SV-2 was stacked in the launch configuration between the Orbital Insertion System and the SV-1 satellite, simulating the upcoming tandem launch. The stack was subjected to the maximum sound and vibration levels expected during launch into low-earth orbit. The testing was performed at Northrop Grumman's acoustic test facility in Redondo Beach, Calif.

After completion of acoustics testing, SV-2 underwent a critical checkout of its moving parts, including the solar arrays and sensor gimbals. The last milestone prior to shipment was the completion of a final functional test. The test provided the final opportunity for the operators to command the vehicle while it was still in the factory, and a multitude of on-orbit procedures were validated as risk reduction for flight.

The two satellites will be placed atop a NASA Delta-II launch vehicle for this summer's launch. The STSS Demonstration satellites will communicate with other elements of the Ballistic Missile Defense System via the Missile Defense Space Experimentation Center ground station, supporting the overall ballistic missile defense program with advanced space-based sensors designed to detect and track ballistic missiles as part of the nation's integrated missile defense system.

Media Contacts: Debra Christman, (719) 325-8289, debra.christman@mda.mil or Rick Lehner, (703) 697-8997, richard.lehner@mda.mil